

DETAILED ACTION

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with "Dean Munyon" on 06/14/2010.

2. The application has been amended as follows:

3. Claims 1-68 have been cancelled.

4. 69.(Currently Amended) An apparatus for a modular computer system, comprising:

a combined switch and service processor module for a modular computer system configured to couple to an information processing module, comprising wherein the combined switch and service processor module includes:

a switch portion;

a service processor portion;

a data interface configured to communicate with an external management entity via a network; and

a fault management unit configured to receive fault messages generated by the switch portion and by the service processor portion, including respective fault messages generated by the switch portion and the service processor portion that relate

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to a ~~common~~ same fault of the information processing module, and wherein the fault management unit is further configured to perform processing on a received fault message to determine whether to forward the received message to the external management entity via the data interface, wherein the fault management unit is configured to not forward fault messages that relate to ~~[[a]]~~ the same fault for which the fault management unit has already forwarded a fault message to the external management entity;

wherein the apparatus is further configured to detect that the information processing module is outputting erroneous data relating to the same fault, and, in response thereto, to disable further communication of erroneous data by the information processing module.

70. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 69, wherein the fault management unit is implemented within the service processor portion.

71. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 69, wherein the fault management unit is configured to store~~[[s]]~~ details of the fault messages ~~received~~ irrespective of whether the fault messages ~~[[is]]~~ are forwarded to the external management entity.

72. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 71, wherein the stored details of the fault messages includes data describing an action taken by the originator of ~~the~~ a given fault message in response to detection of the fault.

73. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 71, wherein the stored details of the fault messages are analyzed to determine whether any reversal actions are required by the originator of a given fault message when a fault repair is attempted.

74-75. (Canceled)

76. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 69, wherein the switch portion and service processor portion are implemented by separate hardware within the combined switch and service processor module.

77. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 69, wherein the switch portion and service processor portion are implemented by common hardware within the combined switch and service processor module.

78. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 69, wherein the service processor portion is configured to operate in a master/slave relationship with a service processor portion of ~~a further another~~ combined switch and service processor module of the modular computer system; and

wherein the service processor portion is further configured to automatically synchronize management information with the service processor portion of the ~~further other~~ combined switch and service processor via the data interface in accordance with the master/slave relationship.

79. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 69, wherein the switch and service processor portions are each configured to communicate with the external management entity to obtain a unique address within a computing environment into which the modular computer system is connected.

80. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 69, wherein the service processor portion has a user interface configured to receive and forward communications between the external management entity and the switch portion.

81. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 69, wherein the switch and service processor portions are

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each configured to create a unique identifier using data unique to the respective portions; and

wherein the service processor portion is configured to supply the service processor portion's unique identifier to the switch.

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82. (Currently Amended) A computer system comprising:

an information processing module;

a combined switch and service processor module, including ~~comprising~~:

a switch portion;

a service processor portion;

a data interface configured to communicate with an external management entity via a network; and

a fault management unit configured to receive fault messages generated by the switch portion and by the service processor portion, including respective fault messages generated by the switch portion and the service processor portion that relate to a ~~common~~ same fault of the information processing module, and wherein the fault management unit is further configured to perform processing on a received fault message to determine whether to forward the received message to the external management entity via the data interface, wherein the fault management unit is configured to not forward fault messages that relate to [[a]] the same fault for which the fault management unit has already forwarded a fault message to the external management entity;

wherein the computer system is further configured to detect that the information processing module is outputting erroneous data relating to the same fault, and, in response thereto, to disable further communication of erroneous data by the information processing module.

83-85 (Canceled)

86. (Currently Amended) A method of operating a combined switch and service processor module for a modular computer system, the combined switch and service processor module having:

- a switch portion;
- a service processor portion;
- a data interface configured to communicate with an external management entity via a network; and

- a fault management unit; the method comprising:
 - the fault management unit receiving fault messages generated by the switch portion and by the service processor portion including a first fault message generated by the switch portion and a second fault message generated by the service processor portion, wherein the first and second fault messages relate to a ~~common~~ same fault of an information processing module of the modular computer system;

- the fault management unit performing processing on a received fault message to determine whether to forward the received message to the external management entity via the data interface; and

- the fault management unit not forwarding fault messages that relate to ~~[[a]]~~ the same fault for which the fault management unit has already forwarded a fault message to the external management entity;

- the modular computer system detecting that the information processing module is outputting erroneous data relating to the same fault, and, in response thereto,

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disabling further communication of erroneous data by the information processing module.

87. (Previously Presented) The computer system of claim 82, wherein the fault management unit is implemented within the service processor portion.

88. (Currently Amended) The computer system of claim 82, wherein the fault management unit is further configured to store details of the fault messages ~~received~~ irrespective of whether the fault messages ~~[[is]]~~ are forwarded to the external management entity.

89. (Currently Amended) The computer system of claim 88, wherein the stored details of the fault messages include data describing an action taken by the originator of ~~[[the]]~~ a given fault message in response to detection of the fault.

90. (Currently Amended) The computer system of claim 88, wherein the fault management unit is further configured to analyze the stored details of the fault messages to determine whether any reversal actions are required by the originator of a given fault message when a fault repair is attempted.

91-92. (Canceled)

93. (Currently Amended) The computer system of claim 82, wherein the service processor portion is configured to operate in a master/slave relationship with a

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service processor portion of a ~~further~~ another combined switch and service processor module of the computer system; and

wherein the service processor portion is further configured to automatically synchronize management information with the service processor portion of the ~~further~~ other combined switch and service processor via the data interface in accordance with the master/slave relationship.

94. (Previously Presented) The method of claim 86, wherein the fault management unit is implemented within the service processor portion.

95. (Currently Amended) The method of claim 86, further comprising the fault management unit storing details of the fault messages ~~received~~ irrespective of whether the fault messages [[is]] are forwarded to the external management entity.

96. (Currently Amended) The method of claim 95, wherein the stored details of the fault messages includes data describing an action taken by the originator of [[the]] a given fault message in response to detection of the fault.

97. (Currently Amended) The method of claim 95, further comprising the fault management unit analyzing the stored details of the fault messages to determine whether any reversal actions are required by the originator of a given fault message when a fault repair is attempted.

98-99. (Canceled)

100. (Currently Amended) The method of claim 86, further comprising operating the service processor portion in a master/slave relationship with a service processor portion of ~~a further~~ another combined switch and service processor module of the modular computer system; and

the service processor portion automatically synchronizing management information with the service processor portion of the ~~further~~ other combined switch and service processor via the data interface in accordance with the master/slave relationship.

101. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 69, wherein the switch portion is configured to:

~~detect a fault in an information processing module coupled to the switch portion;~~

~~in response to detecting a fault in the information processing module:~~

disable further communication of the erroneous data by the information processing module, by disabling[[e]] the a network port of the information processing module; and

~~convey a corresponding fault message to the fault management unit.~~

102. (Currently Amended) The computer system of claim 82, wherein the switch portion is configured to:

~~detect a fault in an information processing module coupled to the switch portion;~~

~~in response to detecting a fault in the information processing module:~~

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disable further communication of the erroneous data by the information processing module, by disabling[[e]] ~~the a~~ network port of the information processing module; and

~~convey a corresponding fault message to the fault management unit.~~

103. (Currently Amended) The method of claim 86, further comprising:
~~the switch portion detecting a fault in an information processing module;~~

~~in response to the detecting:~~

the switch portion disabling further communication of the erroneous data by the information processing module, by disabling ~~[[the]]~~ a network port of the information processing module; ~~and the switch portion conveying a corresponding fault message to the fault management unit.~~

104. (Currently Amended) The apparatus ~~combined switch and service processor module~~ of claim 69, wherein the fault management unit is configured to:

receive a first fault message generated by the switch portion that relates to a particular fault;

forward the first fault message to the external management entity;

receive a second fault message generated by the service portion, wherein the second fault message relates to the particular fault, and wherein the second fault message is received by the fault management unit after receiving the first fault message; and

not forward the second fault message to the external management entity in response to determining that the second fault message is related to the particular fault and that the first fault message has already been forwarded to the external management entity.

Allowable Subject Matter

5. The following is an examiner's statement of reasons for allowance:
6. Claims 69-73, 76-82, 86-90, 93-97 and 100-104 are allowed.

Cited Prior art or record singly or in combination does not teaches the limitations among other things, a combined switch and service processor module configured to couple to an information processing module, wherein the combined switch and service processor module includes:

a fault management unit configured to receive fault messages generated by the switch portion and by the service processor portion, including respective fault messages generated by the switch portion and the service processor portion that relate to a same fault of the information processing module₁, and wherein the fault management unit is further configured to perform processing on a received fault message to determine whether to forward the received message to the external management entity via the data interface, wherein the fault management unit is configured to not forward fault messages that relate to the same fault for which the fault management unit has already forwarded a fault message to the external management entity₁;

wherein the apparatus is further configured to detect that the information processing module is outputting erroneous data relating to the same fault, and, in response thereto, to disable further communication of erroneous data by the information processing module.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAUQIR HUSSAIN whose telephone number is (571)270-1247. The examiner can normally be reached on 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on 571 272 6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/T. H./

Examiner, Art Unit 2452

/THU NGUYEN/

Supervisory Patent Examiner, Art Unit 2452